



**Thermal Insulation
Distributors Ltd**

SIDERISE® FIREFLOOR SYSTEMS

A simple and cost effective method of increasing the fire resistance of a compartment timber floor for both newly constructed and existing constructions.

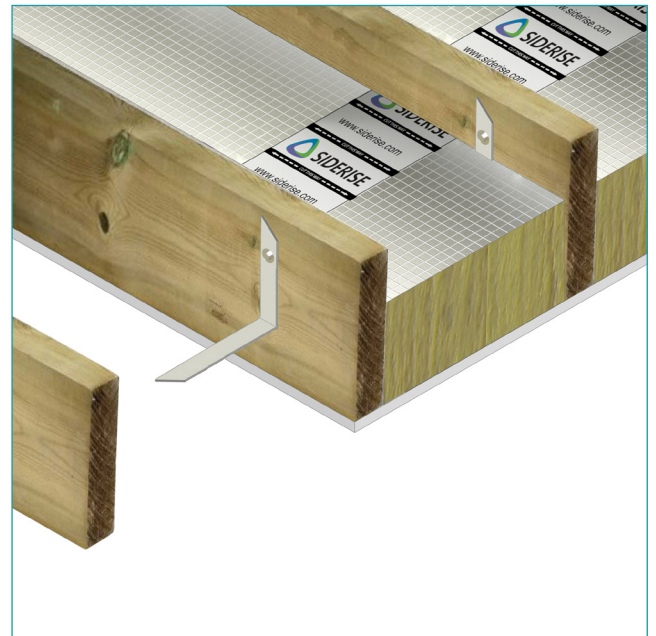
Application

SIDERISE firefloor systems provide a simple and cost effective method of increasing the fire resistance of a compartment timber floor for both newly constructed and existing constructions.

The system comprises a close dimensioned lamella insulation slab which is constructed from a pre-compressed internal mineral fibre core and integral Class 0 aluminium foil facings. The facings act as a smoke barrier.

The slabs that are supplied for the firefloor system come in sheet form and are easy to cut on site before installing between the floors' timber joists. They are fixed in place using brackets which are simply nailed to the joists to provide all necessary support.

Four system options are available. The system selected will depend on the nature of the underlying ceiling which is fitted to the floor, and the joist centres.



Benefits

- High performance with 1 hour fire rating
- Simple to cut and install
- Excellent acoustics performance
- Forms a permanent seal
- Suitable for use with lath and plaster ceilings
- No. 1 in Ireland for 25 years.
- Approved & fully compliant.
- Contractors preferred choice for refurbishment projects.

Product description

SIDERISE firefloor systems insulation slabs are supplied in a standard 1200mm x 1200mm sheet size for cutting on site to suit joist centres. Different material options are available to suit the type of ceiling finish and/or the joist centres, as detailed below. The cut strips are installed with dedicated fixing brackets which are supplied separately. The joints between adjacent strips are sealed with foil tape applied to the top surface only.

FF-NPC60

Is designed for use in constructions where there is no fire resistance contribution from the ceiling layer. This system is, therefore, particularly suited to upgrade constructions with sacrificial ceilings e.g. lath and plaster.

The material is supplied at 90mm thickness and provides 60 minutes fire resistance for joist centres up to 450mm.

FF-NPC60WJ

As above but designed to accommodate wider joist centres, FF-NPC60WJ is 120mm thick and provides 60 minutes fire resistance for joist centres 451 - 610mm.

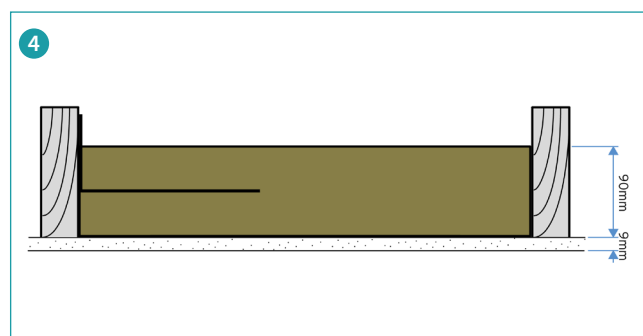
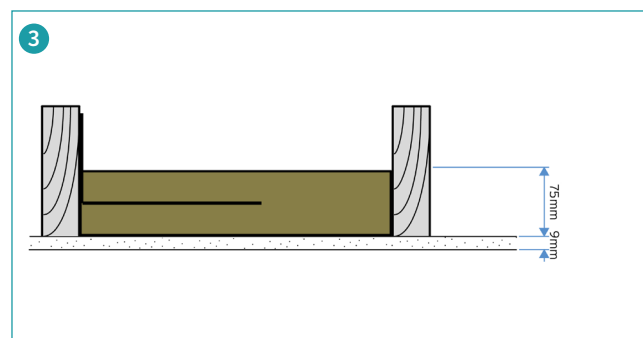
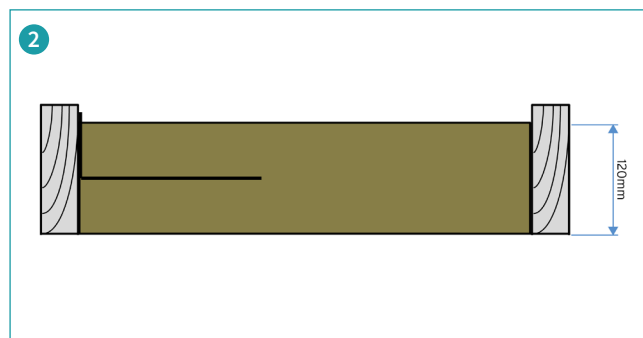
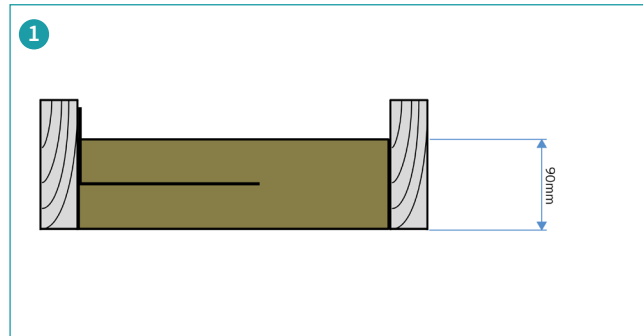
FF-PC60

Is a reduced thickness alternative which is designed for use in constructions with a plasterboard ceiling fixed to the floor*. The plasterboard itself provides a fire resistance contribution to the assembly which has been taken into consideration. FF-PC60 is 75mm thick and provides 60 minutes fire resistance for joist centres up to 450mm.

Note: *For the 'PC' systems, the plasterboard ceiling must be minimum 9mm thick and in generally good condition.

FF-PC60WJ

Used in constructions with a plasterboard ceiling and is fixed to floor with wide joists. FF-PC60WJ is 90mm thick and provides 60 minutes fire resistance for joist centres 451 - 610mm.



- 1 FF-NPC60
- 2 FF-NPC60WJ
- 3 FF-PC60
- 4 FF-PC60WJ

Fire performance

SIDERISE firefloor systems are suitable for installations where a fire rating of up to one hour is specified in accordance with the insulation, integrity and load bearing capacity criteria of BS 476 Part 21 1987.

The Loss Prevention Council have assessed **SIDERISE firefloor systems** as being suitable to protect new or existing floor assemblies which are constructed with joists at least 38mm thick. The floor assembly to which the system is fitted must be in good condition and comply with the requirements of BS 5268.

Given the above requirements, the installation of **SIDERISE firefloor systems** will increase the fire performance of the floor assembly to 60 minutes in terms of the loadbearing capacity, integrity and insulation criteria of BS 476 : Part 21 : 1987.

Verification of fire performance is provided by Loss Prevention Council Assessment No.'s CC 87018A (for joist centres up to 450mm) and CC 87018B (for joist centres 451-610mm).

TABLE 1 : Firefloor fire performance

Fire ratings, joist size and bracket types

Product type	Barrier size	Fire performance	Joist centres	Bracket requirements	Ceiling type
	Thickness (mm)				
FF-NPC60WJ	90	60	Up to 450	3 no B355	Ceiling provides no fire resistance (e.g. lath, plaster)
FF-NPC60WJ	120	60	451 - 610	3 no B355	
FF-PC60	75	60	Up to 450	3 no B355	Plasterboard (minimum 9mm thick) ceiling fixed to floor
FF-PC60WJ	90	60	451 - 610	3 no B355	

Installation

SIDERISE firefloor systems are prepared and installed as follows:

- Cut the sheet into strips to provide a +10mm compression between joists. Cut in the direction as indicated on the firefloor insulation slab (Fig 1). Cut through the foil facings on both sides of the slab with a sharp knife. Carefully cut the mineral fibre with the serrated blade. Avoid a violent jagged sawing action as this will rip the foil facing, as opposed to cleanly cutting it. A bandsaw may be preferred for a quicker and cleaner cut.
- Fixing brackets are supplied in a flat form for suitable folding on site. Impale the galvanised steel B355 fixing brackets into the edge of the material at mid thickness. 3No. brackets are required per 1200mm strip (Fig.2). The brackets are to be positioned with 1No. at 150mm from each end and 1No. centrally on the opposite face.
- Compress the assembly between the joists ensuring that the bottom surface of the material is fitted flush with the soffit of the joists.
- Nail or screw the fixing brackets to the sides of the timber joists. All joints between strips must be tightly abutted. Joints between adjacent strips must be sealed with foil tape to maintain the continuity of the smoke barrier.
- Where herringbone cross braces are fitted to the timber floor, sections of **SIDERISE firefloor** are cut to fit in place above and below the struts. These are held in place with the application of **SIDERISE high temperature adhesive** to the mineral fibre surfaces.

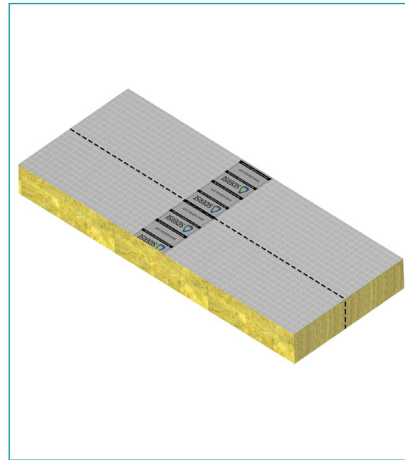


Fig 1. The cutting direction is indicated on the firefloor slab.

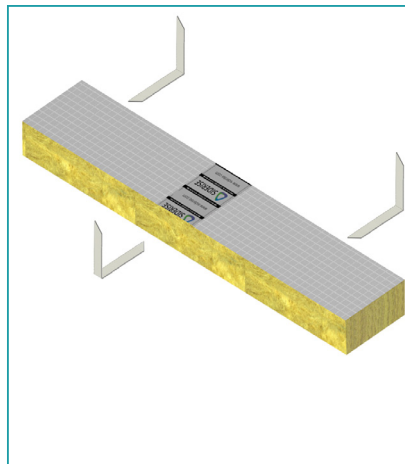


Fig 2. 3No. fixing brackets are required per 1200mm strips.

Technical specification

Form supplied	Sheets 1200 x 1200mm
Colour	Silver*
Finish	Aluminium foil
Thickness	75mm - 120mm
Fire performance	BS 476 : Part 21 : 1987
Reaction to fire	Class '0'

NOTE: *Other options available according to ceiling finish and for joist centres up to 610mm – contact TIDL

Further information

Products available

The following products are available.

- SIDERISE firefloor systems:
 - FF-NPC60
 - FF-NPC60WJ
 - FF-PC60
 - FF-PC60WJ
- SIDERISE Brackets type B355
- Foil tape T303 (45m rolls)
- SIDERISE high temperature adhesive

Ordering

When ordering the following information should be provided:

- The type of floor construction i.e. NPC60 or PC60.
- The width of joist spacings.
- The number of lengths or linear metres required.
- The number of fixing brackets supplied. (As standard 3No. fixing brackets are required per 1200mm strip length.)
- The number of rolls of foil tape required.

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